

Rush Co.
Inert sampling

Complaint
form

PROJECT ID:04700014

SAMPLE ID: DK28124-DK28126

DESCRIPTOR: COMPLAINT RESPONSE

IDEML

1113310-18

Project:DK28124-26



**Environmental
Health Laboratories**

The Nation's Drinking Water Laboratory

110 S. Hill Street
South Bend, IN 46617
574.233.4777
800.332.4345
Fax: 574.233.8207
Division of Underwriters Laboratories Inc.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
INDIANAPOLIS**

OFFICE MEMORANDUM

TO: Jim Harris
Ground Water Section

FROM: Mitt Denney
Ground Water Section *MD*

SUBJECT: Site ID: 04700014, IDEM Sample ID: DK28124-DK28126

DATE: 1/3/2005

THRU: James Sullivan, Section Chief
Ground Water *JJS*

I have reviewed the attached results and have determined that the results are acceptable for use. The results have been evaluated for the quality criteria contained in the Ground Water Quality Assurance Program Plan and BAA 1-86. Reviews are confined to the Regulated Drinking Water Contaminants and positive detects of chemical compounds. Unless specified otherwise in this memorandum, analytical results for compounds listed on the Primary and Secondary Drinking Water Standards Lists, for the sample(s) identified in the specified analytical report, are acceptable for quantitative purposes. Any qualification for the acceptance of these results will be identified in this memorandum. This memorandum should remain attached to the original results.

QA/QC Samples

QA/QC samples were within acceptable limits for the analyses performed.



**Environmental Health Laboratories
The Nations Drinking Water Laboratory
Division of Underwriters Laboratories Inc.**

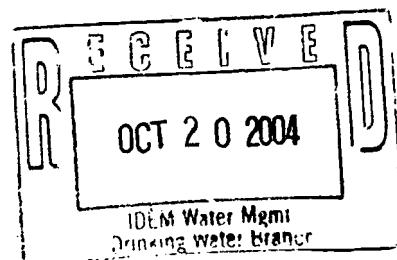
110 South Hill Street
South Bend, IN 46617
Phone: (574) 233-4777
Fax: (574) 233-8207

LABORATORY REPORT

This report contains 29 pages.
(including the cover page)

If you have any questions concerning this report, please do not hesitate to call us at 1-800-332-4345 or 574-233-4777.

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Environmental Health Laboratories

The Nation's Drinking Water Laboratory

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South Bend, IN 46617
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800.332.4345
Fax: 574.233.8207
www.ehl.cc

LABORATORY REPORT

Client: IDEM
Attn: Mitt Denney
Ground Water Section, P.O. Box 6015
100 North Senate Avenue
Indianapolis, IN 46206-6015

Report #: 1113310-18
Priority: Standard Written
Status: Final

Project : DK28124-26 / Site ID 04700014

Samples Submitted: Nine groundwater samples

Copies to: None

Collected: 09/29/04 By: Client Received: 09/30/04

REPORT SUMMARY

Nine groundwater samples were submitted for analysis of Methods 200.7, 200.8, 245.1, 300.0, 353.2 and 2320B.

A summary of the detections by sample accompanies this case narrative. If a parameter is not listed in the summary of detections, it was not detected above the MRL in the sample.

Analytical results were designated as reportable based upon the associated quality control samples. Deviations from method requirements are noted below.

Note: In the Method 200.8 analysis for sites DK28124 and DK28126, arsenic was detected in the samples submitted for analysis at concentrations of 35 ug/L and 10 ug/L, which are greater than or equal to the current MCL of 10 ug/L.

Note: Sample containers were provided by the client.

EPA 200.7

MS/MSD: The MS and MSD recoveries for calcium and magnesium were not required. Recovery calculations are not required if the concentration of the analyte added is less than 30% of the sample background concentration.

EPA 200.8

Run 69377

There were no deviations from method requirements in this run.

Run 69444

There were no deviations from method requirements in this run.

EPA 245.1

There were no deviations from method requirements in this run.

Client: IDEM

Report #: 1113310-18

EPA 300.0

Run 69510

There were no deviations from method requirements in this run.

Run 69589

There were no deviations from method requirements in this run.

EPA 353.2

There were no deviations from method requirements in this run.

SM 2320B

There were no deviations from method requirements in this run.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call Nathan Trowbridge at (574) 233-4777.

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Reviewed By

Site Mgr

Date

10-19-04

Finalized By

Tom

Date

10-19-04



Environmental Health Laboratories

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LABORATORY REPORT

Client: IDEM
Attn: Mitt Denney
Ground Water Section, P.O. Box 6015
100 North Senate Avenue
Indianapolis, IN 46206-6015

Report #: 1113310-18
Priority: Standard Written
Status: Final

Project : DK28124-26 / Site ID 04700014

Samples Submitted: Nine groundwater samples

Copies to: None

Collected: 09/29/04

By: Client

Received: 09/30/04

REPORT SUMMARY

Nine groundwater samples were submitted for analysis of Methods 200.7, 200.8, 245.1, 300.0, 353.2 and 2320B.

A summary of the detections by sample accompanies this case narrative. If a parameter is not listed in the summary of detections, it was not detected above the MRL in the sample.

Analytical results were designated as reportable based upon the associated quality control samples. Deviations from method requirements are noted below.

Note: In the Method 200.8 analysis for sites DK28124 and DK28126, arsenic was detected in the samples submitted for analysis at concentrations of 35 ug/L and 10 ug/L, which are greater than or equal to the current MCL of 10 ug/L.

Note: Sample containers were provided by the client.

EPA 200.7

There were no deviations from method requirements in this run.

EPA 200.8

Run 69377

There were no deviations from method requirements in this run.

Run 69444

There were no deviations from method requirements in this run.

EPA 245.1

There were no deviations from method requirements in this run.

Client: IDEM

Report #: 1113310-18

EPA 300.0

Run 69510

There were no deviations from method requirements in this run.

Run 69589

There were no deviations from method requirements in this run.

EPA 353.2

There were no deviations from method requirements in this run.

SM 2320B

There were no deviations from method requirements in this run.

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Reviewed By



Site Manager

Date

10-19-2004

Finalized By



fm

Date

10-19-04



Environmental Health Laboratories

The Nation's Drinking Water Laboratory

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South Bend, IN 46617
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LABORATORY REPORT

Client: IDEM Report: 1113310-18
Attn: Mitt Denney
Ground Water Section, P.O. Box 6015 Priority: Standard Written
100 North Senate Avenue
Indianapolis, IN 46206-6015 Status: Final

Project: DK28124-26 / Site ID 04700014

SUMMARY OF DETECTIONS

Sample ID: 1113310

Parameter

Chloride
Alkalinity, Total

Sample Site: DK28124

Method	Result	Units	Run #
300.0	14	mg/L	69510
2320 B	350	mg/L as Ca	69384

Sample ID: 1113311

Parameter

Arsenic
Barium
Boron
Chromium
Lead
Nickel
Calcium
Iron
Magnesium
Potassium
Sodium

Sample Site: DK28124

Method	Result	Units	Run #
200.8	,035mg/L	ug/L	69377
200.8	,920	ug/L	69377
200.8	,290	ug/L	69444
200.8	,021	ug/L	69377
200.8	,0013	ug/L	69377
200.8	,010	ug/L	69377
200.7	61	mg/L	69418
200.7	1.5	mg/L	69418
200.7	31	mg/L	69418
200.7	1.9	mg/L	69418
200.7	36	mg/L	69418

Sample ID: 1113313

Parameter

Chloride
Sulfate
Alkalinity, Total

Sample Site: DK28125

Method	Result	Units	Run #
300.0	14	mg/L	69510
300.0	38	mg/L	69510
2320 B	320	mg/L as Ca	69384

Sample ID: 1113314

Parameter

Barium
Boron
Chromium
Copper
Nickel
Calcium
Iron
Magnesium
Potassium
Sodium

Sample Site: DK28125

Method	Result	Units	Run #
200.8	290	ug/L	69377
200.8	29	ug/L	69444
200.8	,022	ug/L	69377
200.8	1.2	ug/L	69377
200.8	16	ug/L	69377
200.7	95	mg/L	69418
200.7	2.8	mg/L	69418
200.7	33	mg/L	69418
200.7	1.1	mg/L	69418
200.7	5.0	mg/L	69418

SUMMARY OF DETECTIONS - Continued

Sample ID: 1113316

Parameter

Chloride
Sulfate
Alkalinity, Total

Sample Site: DK28126

Method	Result	Units	Run #
300.0	14	mg/L	69510
300.0	42	mg/L	69510
2320 B	330	mg/L as Ca	69384

Sample ID: 1113317

Parameter

Arsenic
Barium
Boron
Chromium
Copper
Lead
Nickel
Calcium
Iron
Magnesium
Potassium
Sodium

Sample Site: DK28126

Method	Result	Units	Run #
200.8	.010	ug/L	69377
200.8	.570	ug/L	69377
200.8	.031	ug/L	69444
200.8	.619	ug/L	69377
200.8		1.1 ug/L	69377
200.8		1.8 ug/L	69377
200.8		14 ug/L	69377
200.7		89 mg/L	69418
200.7		2.9 mg/L	69418
200.7		36 mg/L	69418
200.7		1.0 mg/L	69418
200.7		8.0 mg/L	69418

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Reviewed By

Site Manager

Title

10-19-2004

Date

Finalized By

PK

Title

10-19-04

Date

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 69377
PC File Name: 100104D
Order Number: 102971

Instrument: ICP-MS Y
Analyst: T. Olejnik
Receipt Batch: 132599

Method(s): 200.8
Submitted By: T. Olejnik
Today's Date: 10/19/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1113781
Extracted: N/A

Type: Initial Cali. Verification
Analyzed: 10/01/2004 18:28

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-36-0	Antimony	50.0	50.2016	100	90-110	Pass
7440-38-2	Arsenic	50.0	50.2354	100	90-110	Pass
7440-39-3	Barium	50.0	49.3063	99	90-110	Pass
7440-41-7	Beryllium	50.0	49.8794	100	90-110	Pass
7440-43-9	Cadmium	50.0	49.0111	98	90-110	Pass
7440-47-3	Chromium	50.0	50.1540	100	90-110	Pass
7440-50-8	Copper	50.0	49.6634	99	90-110	Pass
7439-92-1	Lead	50.0	49.7489	99	90-110	Pass
7440-02-0	Nickel	50.0	49.9205	100	90-110	Pass
7440-69-9	Bismuth (Internal Standard)	1.0	1.0250	102	60-125	Pass
7440-74-6	Indium (Internal Standard)	1.0	1.0400	104	60-125	Pass
7440-20-2	Scandium (Internal Standard)	1.0	1.0380	104	60-125	Pass
7440-65-5	Yttrium (Internal Standard)	1.0	1.0540	105	60-125	Pass

Sample ID: 1113782
Extracted: N/A

Type: Initial Calibration Blank
Analyzed: 10/01/2004 18:35

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-36-0	Antimony	1.0	0.5242	< 1.0	ug/L
7440-38-2	Arsenic	2.0	-0.2912	< 2.0	ug/L
7440-39-3	Barium	2.0	0.0067	< 2.0	ug/L
7440-41-7	Beryllium	0.3	-0.0014	< 0.3	ug/L
7440-43-9	Cadmium	1.0	-0.0010	< 1.0	ug/L
7440-47-3	Chromium	2.0	-0.0561	< 2.0	ug/L
7440-50-8	Copper	1.0	-0.0280	< 1.0	ug/L
7439-92-1	Lead	1.0	0.0272	< 1.0	ug/L
7440-02-0	Nickel	1.0	-0.0016	< 1.0	ug/L
7440-69-9	Bismuth (Internal Standard)	N/A	1.0340	103	% Recovery
7440-74-6	Indium (Internal Standard)	N/A	1.0440	104	% Recovery
7440-20-2	Scandium (Internal Standard)	N/A	1.0550	105	% Recovery
7440-65-5	Yttrium (Internal Standard)	N/A	1.0660	107	% Recovery

Sample ID: 1113783
Extracted: N/A

Type: Quality Control Sample
Analyzed: 10/01/2004 18:41

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-36-0	Antimony	50.0	50.3318	101	90-110	Pass
7440-38-2	Arsenic	50.0	51.6799	103	90-110	Pass
7440-39-3	Barium	50.0	51.4396	103	90-110	Pass
7440-41-7	Beryllium	50.0	52.2070	104	90-110	Pass
7440-43-9	Cadmium	50.0	51.1328	102	90-110	Pass
7440-47-3	Chromium	50.0	52.1793	104	90-110	Pass
7440-50-8	Copper	50.0	51.7496	103	90-110	Pass
7439-92-1	Lead	50.0	52.3471	105	90-110	Pass
7440-02-0	Nickel	50.0	51.8571	104	90-110	Pass
7440-69-9	Bismuth (Internal Standard)	1.0	1.0320	103	60-125	Pass
7440-74-6	Indium (Internal Standard)	1.0	1.0510	105	60-125	Pass
7440-20-2	Scandium (Internal Standard)	1.0	1.0480	105	60-125	Pass
7440-65-5	Yttrium (Internal Standard)	1.0	1.0740	107	60-125	Pass

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 69377
PC File Name: 100104D
Order Number: 102971

Instrument: ICP-MS Y
Analyst: T. Olejnik
Receipt Batch: 132599

Method(s): 200.8
Submitted By: T. Olejnik
Today's Date: 10/19/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1113784 Type: Laboratory Reagent Blank
Extracted: N/A Analyzed: 10/01/2004 18:48

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-36-0	Antimony	1.0	0.2073	< 1.0	ug/L
7440-38-2	Arsenic	2.0	-0.3069	< 2.0	ug/L
7440-39-3	Barium	2.0	0.0163	< 2.0	ug/L
7440-41-7	Beryllium	0.3	0.0050	< 0.3	ug/L
7440-43-9	Cadmium	1.0	0.0035	< 1.0	ug/L
7440-47-3	Chromium	2.0	-0.0757	< 2.0	ug/L
7440-50-8	Copper	1.0	-0.0309	< 1.0	ug/L
7439-92-1	Lead	1.0	0.0280	< 1.0	ug/L
7440-02-0	Nickel	1.0	-0.0161	< 1.0	ug/L
7440-69-9	Bismuth (Internal Standard)	N/A	1.0490	105	% Recovery
7440-74-6	Indium (Internal Standard)	N/A	1.0560	106	% Recovery
7440-20-2	Scandium (Internal Standard)	N/A	1.0590	106	% Recovery
7440-65-5	Yttrium (Internal Standard)	N/A	1.0720	107	% Recovery

Sample ID: 1113785 Type: Laboratory Fortified Blank
Extracted: N/A Analyzed: 10/01/2004 18:54

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-36-0	Antimony	100	99.5964	100	85-115	Pass
7440-38-2	Arsenic	100	99.1132	99	85-115	Pass
7440-39-3	Barium	100	98.9916	99	85-115	Pass
7440-41-7	Beryllium	100	98.5601	99	85-115	Pass
7440-43-9	Cadmium	100	98.9176	99	85-115	Pass
7440-47-3	Chromium	100	99.4042	99	85-115	Pass
7440-50-8	Copper	100	98.7885	99	85-115	Pass
7439-92-1	Lead	100	99.7834	100	85-115	Pass
7440-02-0	Nickel	100	99.2835	99	85-115	Pass
7440-69-9	Bismuth (Internal Standard)	1.0	1.0460	105	60-125	Pass
7440-74-6	Indium (Internal Standard)	1.0	1.0550	105	60-125	Pass
7440-20-2	Scandium (Internal Standard)	1.0	1.0510	105	60-125	Pass
7440-65-5	Yttrium (Internal Standard)	1.0	1.0730	107	60-125	Pass

Sample ID: 1113786 Type: Continuing Cali. Verification
Extracted: N/A Analyzed: 10/01/2004 20:14

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-36-0	Antimony	50.0	51.2349	102	85-115	Pass
7440-38-2	Arsenic	50.0	51.2101	102	85-115	Pass
7440-39-3	Barium	50.0	49.8317	100	85-115	Pass
7440-41-7	Beryllium	50.0	49.8512	100	85-115	Pass
7440-43-9	Cadmium	50.0	49.6837	99	85-115	Pass
7440-47-3	Chromium	50.0	51.2174	102	85-115	Pass
7440-50-8	Copper	50.0	49.2769	99	85-115	Pass
7439-92-1	Lead	50.0	49.8425	100	85-115	Pass
7440-02-0	Nickel	50.0	50.1489	100	85-115	Pass
7440-69-9	Bismuth (Internal Standard)	1.0	1.0090	101	60-125	Pass
7440-74-6	Indium (Internal Standard)	1.0	1.0290	103	60-125	Pass
7440-20-2	Scandium (Internal Standard)	1.0	1.0500	105	60-125	Pass
7440-65-5	Yttrium (Internal Standard)	1.0	1.0490	105	60-125	Pass

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 69377
PC File Name: 100104D
Order Number: 102971

Instrument: ICP-MS Y
Analyst: T. Olejnik
Receipt Batch: 132599

Method(s): 200.8
Submitted By: T. Olejnik
Today's Date: 10/19/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1113787 Type: Continuing Calibration Blank
Extracted: N/A Analyzed: 10/01/2004 20:20
Site: N/A Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-36-0	Antimony	1.0	0.5701	< 1.0	ug/L
7440-38-2	Arsenic	2.0	-0.1422	< 2.0	ug/L
7440-39-3	Barium	2.0	0.0180	< 2.0	ug/L
7440-41-7	Beryllium	0.3	0.0205	< 0.3	ug/L
7440-43-9	Cadmium	1.0	0.0092	< 1.0	ug/L
7440-47-3	Chromium	2.0	0.3413	< 2.0	ug/L
7440-50-8	Copper	1.0	-0.0521	< 1.0	ug/L
7439-92-1	Lead	1.0	0.0431	< 1.0	ug/L
7440-02-0	Nickel	1.0	0.0988	< 1.0	ug/L
7440-69-9	Bismuth (Internal Standard)	N/A	1.0030	100	% Recovery
7440-74-6	Indium (Internal Standard)	N/A	1.0310	103	% Recovery
7440-20-2	Scandium (Internal Standard)	N/A	1.0620	106	% Recovery
7440-65-5	Yttrium (Internal Standard)	N/A	1.0510	105	% Recovery

Sample ID: 1113311 Type: Field Sample
Extracted: N/A Analyzed: 10/01/2004 20:34
Site: DK28124 Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-36-0	Antimony	1.0	-0.1204	< 1.0	ug/L
7440-38-2	Arsenic	2.0	35.0769	35	ug/L
7440-39-3	Barium	2.0	917.3095	920	ug/L
7440-41-7	Beryllium	0.3	0.0078	< 0.3	ug/L
7440-43-9	Cadmium	1.0	0.2669	< 1.0	ug/L
7440-47-3	Chromium	2.0	20.9101	21	ug/L
7440-50-8	Copper	1.0	0.9982	< 1.0	ug/L
7439-92-1	Lead	1.0	1.2549	1.3	ug/L
7440-02-0	Nickel	1.0	9.9973	10	ug/L
7440-69-9	Bismuth (Internal Standard)	N/A	0.9100	91	% Recovery
7440-74-6	Indium (Internal Standard)	N/A	0.9680	97	% Recovery
7440-20-2	Scandium (Internal Standard)	N/A	1.0500	105	% Recovery
7440-65-5	Yttrium (Internal Standard)	N/A	1.0140	101	% Recovery

Sample ID: 1113314 Type: Field Sample
Extracted: N/A Analyzed: 10/01/2004 20:40
Site: DK28125 Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-36-0	Antimony	1.0	-0.1388	< 1.0	ug/L
7440-38-2	Arsenic	2.0	0.6100	< 2.0	ug/L
7440-39-3	Barium	2.0	291.3760	290	ug/L
7440-41-7	Beryllium	0.3	0.0003	< 0.3	ug/L
7440-43-9	Cadmium	1.0	0.0534	< 1.0	ug/L
7440-47-3	Chromium	2.0	22.3580	22	ug/L
7440-50-8	Copper	1.0	1.2478	1.2	ug/L
7439-92-1	Lead	1.0	0.2524	< 1.0	ug/L
7440-02-0	Nickel	1.0	15.8181	16	ug/L
7440-69-9	Bismuth (Internal Standard)	N/A	0.9240	92	% Recovery
7440-74-6	Indium (Internal Standard)	N/A	0.9810	98	% Recovery
7440-20-2	Scandium (Internal Standard)	N/A	1.0550	105	% Recovery
7440-65-5	Yttrium (Internal Standard)	N/A	1.0190	102	% Recovery

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 69377
PC File Name: 100104D
Order Number: 102971

Instrument: ICP-MS Y
Analyst: T. Olejnik
Receipt Batch: 132599

Method(s): 200.8
Submitted By: T. Olejnik
Today's Date: 10/19/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1113317
Extracted: N/A

Type: Field Sample
Analyzed: 10/01/2004 20:47

Site: DK28126
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-36-0	Antimony	1.0	-0.1649	< 1.0	ug/L
7440-38-2	Arsenic	2.0	10.2155	10	ug/L
7440-39-3	Barium	2.0	574.5514	570	ug/L
7440-41-7	Beryllium	0.3	-0.0121	< 0.3	ug/L
7440-43-9	Cadmium	1.0	0.1160	< 1.0	ug/L
7440-47-3	Chromium	2.0	19.1529	19	ug/L
7440-50-8	Copper	1.0	1.1347	1.1	ug/L
7439-92-1	Lead	1.0	1.7808	1.8	ug/L
7440-02-0	Nickel	1.0	14.2627	14	ug/L
7440-69-9	Bismuth (Internal Standard)	N/A	0.9300	93	% Recovery
7440-74-6	Indium (Internal Standard)	N/A	0.9810	98	% Recovery
7440-20-2	Scandium (Internal Standard)	N/A	1.0650	106	% Recovery
7440-65-5	Yttrium (Internal Standard)	N/A	1.0250	102	% Recovery

Sample ID: 1113788
Extracted: N/A

Type: Continuing Cali. Verification
Analyzed: 10/01/2004 20:53

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-36-0	Antimony	50.0	49.8487	100	85-115	Pass
7440-38-2	Arsenic	50.0	51.1283	102	85-115	Pass
7440-39-3	Barium	50.0	50.1271	100	85-115	Pass
7440-41-7	Beryllium	50.0	48.5709	97	85-115	Pass
7440-43-9	Cadmium	50.0	49.0792	98	85-115	Pass
7440-47-3	Chromium	50.0	51.4414	103	85-115	Pass
7440-50-8	Copper	50.0	49.1045	98	85-115	Pass
7439-92-1	Lead	50.0	49.7702	100	85-115	Pass
7440-02-0	Nickel	50.0	49.5934	99	85-115	Pass
7440-69-9	Bismuth (Internal Standard)	1.0	1.0160	102	60-125	Pass
7440-74-6	Indium (Internal Standard)	1.0	1.0270	103	60-125	Pass
7440-20-2	Scandium (Internal Standard)	1.0	1.0350	103	60-125	Pass
7440-65-5	Yttrium (Internal Standard)	1.0	1.0410	104	60-125	Pass

Sample ID: 1113789
Extracted: N/A

Type: Continuing Calibration Blank
Analyzed: 10/01/2004 21:00

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-36-0	Antimony	1.0	0.3046	< 1.0	ug/L
7440-38-2	Arsenic	2.0	-0.0537	< 2.0	ug/L
7440-39-3	Barium	2.0	0.0190	< 2.0	ug/L
7440-41-7	Beryllium	0.3	0.0026	< 0.3	ug/L
7440-43-9	Cadmium	1.0	-0.0058	< 1.0	ug/L
7440-47-3	Chromium	2.0	0.4642	< 2.0	ug/L
7440-50-8	Copper	1.0	-0.0293	< 1.0	ug/L
7439-92-1	Lead	1.0	0.0293	< 1.0	ug/L
7440-02-0	Nickel	1.0	0.0748	< 1.0	ug/L
7440-69-9	Bismuth (Internal Standard)	N/A	1.0140	101	% Recovery
7440-74-6	Indium (Internal Standard)	N/A	1.0270	103	% Recovery
7440-20-2	Scandium (Internal Standard)	N/A	1.0410	104	% Recovery
7440-65-5	Yttrium (Internal Standard)	N/A	1.0390	104	% Recovery

**Environmental Health Laboratories
Extended Result Record Sheet**

Run Number: 69384
PC File Name: N/A
Order Number: 102971

Instrument: Chem Analyzer BB
Analyst: T. Olejnik
Receipt Batch: 132599

Method(s): 2320 B
Submitted By: N. Banaszak
Today's Date: 10/19/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1113847
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 10/04/2004 11:46

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
N/A	Alkalinity, Total	1.0	0.1000	< 1.0	mg/L as Ca

Sample ID: 1113848
Extracted: N/A

Type: Quality Control Sample
Analyzed: 10/04/2004 11:52

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
N/A	Alkalinity, Total	100	99.0000	99	90-110	Pass

Sample ID: 1113849
Extracted: N/A

Type: Laboratory Fortified Blank
Analyzed: 10/04/2004 11:58

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
N/A	Alkalinity, Total	100	100.7000	101	90-110	Pass

Sample ID: 1113310
Extracted: N/A

Type: Field Sample
Analyzed: 10/04/2004 12:43

Site: DK28124
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
N/A	Alkalinity, Total	1.0	346.7000	350	mg/L as Ca

Sample ID: 1113313
Extracted: N/A

Type: Field Sample
Analyzed: 10/04/2004 12:49

Site: DK28125
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
N/A	Alkalinity, Total	1.0	324.6000	320	mg/L as Ca

Sample ID: 1113316
Extracted: N/A

Type: Field Sample
Analyzed: 10/04/2004 12:55

Site: DK28126
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
N/A	Alkalinity, Total	1.0	333.3000	330	mg/L as Ca

Sample ID: 1113852
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 10/04/2004 12:59

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
N/A	Alkalinity, Total	1.0	0.1000	< 1.0	mg/L as Ca

Sample ID: 1113853
Extracted: N/A

Type: Quality Control Sample
Analyzed: 10/04/2004 13:04

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
N/A	Alkalinity, Total	100	99.2000	99	90-110	Pass

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 69418
PC File Name: 100404B
Order Number: 102971

Instrument: ICP-AES BX
Analyst: R. Siery
Receipt Batch: 132599

Method(s): 200.7
Submitted By: R. Siery
Today's Date: 10/19/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1114364
Extracted: N/A

Type: Initial Calibration Blank
Analyzed: 10/04/2004 18:29

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-70-2	Calcium	0.1	0.0000	< 0.1	mg/L
7439-89-6	Iron	0.02	0.0000	< 0.02	mg/L
7439-95-4	Magnesium	0.1	0.0000	< 0.1	mg/L
7440-09-7	Potassium	0.2	0.0000	< 0.2	mg/L
7440-23-5	Sodium	0.1	0.0000	< 0.1	mg/L

Sample ID: 1114371
Extracted: N/A

Type: Quality Control Sample
Analyzed: 10/04/2004 18:54

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-70-2	Calcium	5.0	5.1103	102	95-105	Pass
7439-89-6	Iron	5.0	5.0236	100	95-105	Pass
7439-95-4	Magnesium	5.0	4.9118	98	95-105	Pass
7440-09-7	Potassium	10.0	10.1112	101	95-105	Pass
7440-23-5	Sodium	5.0	5.0585	101	95-105	Pass

Sample ID: 1114372
Extracted: N/A

Type: Continuing Calibration Blank
Analyzed: 10/04/2004 18:57

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-70-2	Calcium	0.1	0.0098	< 0.1	mg/L
7439-89-6	Iron	0.02	0.0015	< 0.02	mg/L
7439-95-4	Magnesium	0.1	0.0009	< 0.1	mg/L
7440-09-7	Potassium	0.2	0.0004	< 0.2	mg/L
7440-23-5	Sodium	0.1	-0.0006	< 0.1	mg/L

Sample ID: 1114373
Extracted: N/A

Type: Laboratory Reagent Blank
Analyzed: 10/04/2004 19:01

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-70-2	Calcium	0.1	0.0026	< 0.1	mg/L
7439-89-6	Iron	0.02	0.0002	< 0.02	mg/L
7439-95-4	Magnesium	0.1	0.0004	< 0.1	mg/L
7440-09-7	Potassium	0.2	0.0000	< 0.2	mg/L
7440-23-5	Sodium	0.1	-0.0007	< 0.1	mg/L

Sample ID: 1114374
Extracted: N/A

Type: Laboratory Fortified Blank
Analyzed: 10/04/2004 19:04

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-70-2	Calcium	5.0	5.0067	100	85-115	Pass
7439-89-6	Iron	5.0	5.0077	100	85-115	Pass
7439-95-4	Magnesium	5.0	4.9224	98	85-115	Pass
7440-09-7	Potassium	10.0	10.0693	101	85-115	Pass
7440-23-5	Sodium	5.0	5.0230	100	85-115	Pass

Sample ID: 1113311
Extracted: N/A

Type: Field Sample
Analyzed: 10/04/2004 19:46

Site: DK28124
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-70-2	Calcium	0.1	60.5552	61	mg/L
7439-89-6	Iron	0.02	1.4954	1.5	mg/L
7439-95-4	Magnesium	0.1	30.9753	31	mg/L
7440-09-7	Potassium	0.2	1.9285	1.9	mg/L
7440-23-5	Sodium	0.1	35.7968	36	mg/L

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 69418
PC File Name: 100404B
Order Number: 102971

Instrument: ICP-AES BX
Analyst: R. Siery
Receipt Batch: 132599

Method(s): 200.7
Submitted By: R. Siery
Today's Date: 10/19/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1114377 Type: Continuing Inst. Perf. Check Site: N/A
Extracted: N/A Analyzed: 10/04/2004 19:49 Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-70-2	Calcium	5.0	5.1148	102	90-110	Pass
7439-89-6	Iron	5.0	5.0455	101	90-110	Pass
7439-95-4	Magnesium	5.0	4.9789	100	90-110	Pass
7440-09-7	Potassium	10.0	10.1473	101	90-110	Pass
7440-23-5	Sodium	5.0	4.9953	100	90-110	Pass

Sample ID: 1114378 Type: Continuing Calibration Blank Site: N/A
Extracted: N/A Analyzed: 10/04/2004 19:53 Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-70-2	Calcium	0.1	0.0017	< 0.1	mg/L
7439-89-6	Iron	0.02	0.0017	< 0.02	mg/L
7439-95-4	Magnesium	0.1	0.0015	< 0.1	mg/L
7440-09-7	Potassium	0.2	0.0046	< 0.2	mg/L
7440-23-5	Sodium	0.1	0.0080	< 0.1	mg/L

Sample ID: 1113314 Type: Field Sample Site: DK28125
Extracted: N/A Analyzed: 10/04/2004 19:56 Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-70-2	Calcium	0.1	94.7047	95	mg/L
7439-89-6	Iron	0.02	2.8147	2.8	mg/L
7439-95-4	Magnesium	0.1	33.3734	33	mg/L
7440-09-7	Potassium	0.2	1.0528	1.1	mg/L
7440-23-5	Sodium	0.1	4.9641	5.0	mg/L

Sample ID: 1113317 Type: Field Sample Site: DK28126
Extracted: N/A Analyzed: 10/04/2004 20:00 Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-70-2	Calcium	0.1	89.1142	89	mg/L
7439-89-6	Iron	0.02	2.9043	2.9	mg/L
7439-95-4	Magnesium	0.1	35.6169	36	mg/L
7440-09-7	Potassium	0.2	0.9847	1.0	mg/L
7440-23-5	Sodium	0.1	7.9859	8.0	mg/L

Sample ID: 1114379 Type: Matrix Spike Site: DK28126
Extracted: N/A Analyzed: 10/04/2004 20:03 Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	Parent Amt	%Rec	Limits	P/F
7439-89-6	Iron	5.0	7.7766	2.904	97	70-130	Pass
7440-09-7	Potassium	10.0	11.6073	0.985	106	70-130	Pass
7440-23-5	Sodium	5.0	13.3877	7.986	108	70-130	Pass

Sample ID: 1114380 Type: Matrix Spike Duplicate Site: DK28126
Extracted: N/A Analyzed: 10/04/2004 20:06 Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	Parent Amt	%Rec	Limits	P/F
7439-89-6	Iron	5.0	7.6860	2.904	96	70-130	Pass
7440-09-7	Potassium	10.0	11.5289	0.985	105	70-130	Pass
7440-23-5	Sodium	5.0	13.3287	7.986	107	70-130	Pass

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 69418
PC File Name: 100404B
Order Number: 102971

Instrument: ICP-AES BX
Analyst: R. Siery
Receipt Batch: 132599

Method(s): 200.7
Submitted By: R. Siery
Today's Date: 10/19/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1114381	Type: Continuing Inst. Perf. Check	Site: N/A
Extracted: N/A	Analyzed: 10/04/2004 20:38	Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-70-2	Calcium	5.0	5.1295	103	90-110	Pass
7439-89-6	Iron	5.0	5.1182	102	90-110	Pass
7439-95-4	Magnesium	5.0	5.0713	101	90-110	Pass
7440-09-7	Potassium	10.0	10.3344	103	90-110	Pass
7440-23-5	Sodium	5.0	5.0066	100	90-110	Pass

Sample ID: 1114382	Type: Continuing Calibration Blank	Site: N/A
Extracted: N/A	Analyzed: 10/04/2004 20:41	Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-70-2	Calcium	0.1	0.0025	< 0.1	mg/L
7439-89-6	Iron	0.02	0.0012	< 0.02	mg/L
7439-95-4	Magnesium	0.1	0.0006	< 0.1	mg/L
7440-09-7	Potassium	0.2	0.0025	< 0.2	mg/L
7440-23-5	Sodium	0.1	0.0038	< 0.1	mg/L

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 69444
PC File Name: 100504C
Order Number: 102971

Instrument: ICP-MS Y
Analyst: T. Olejnik
Receipt Batch: 132599

Method(s): 200.8
Submitted By: T. Olejnik
Today's Date: 10/19/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1115292
Extracted: N/A

Type: Initial Cali. Verification
Analyzed: 10/05/2004 10:01

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-42-8	Boron	50.0	51.2347	102	90-110	Pass

Sample ID: 1115293
Extracted: N/A

Type: Initial Calibration Blank
Analyzed: 10/05/2004 10:04

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-42-8	Boron	5.0	1.1443	< 5.0	ug/L

Sample ID: 1115294
Extracted: N/A

Type: Quality Control Sample
Analyzed: 10/05/2004 10:06

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-42-8	Boron	50.0	52.1135	104	90-110	Pass

Sample ID: 1115295
Extracted: N/A

Type: Laboratory Reagent Blank
Analyzed: 10/05/2004 10:09

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-42-8	Boron	5.0	0.6336	< 5.0	ug/L

Sample ID: 1115296
Extracted: N/A

Type: Laboratory Fortified Blank
Analyzed: 10/05/2004 10:11

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-42-8	Boron	100	104.1395	104	85-115	Pass

Sample ID: 1113311
Extracted: N/A

Type: Field Sample
Analyzed: 10/05/2004 10:14

Site: DK28124
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-42-8	Boron	5.0	289.0624	290	ug/L

Sample ID: 1113314
Extracted: N/A

Type: Field Sample
Analyzed: 10/05/2004 10:16

Site: DK28125
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-42-8	Boron	5.0	28.7372	29	ug/L

Sample ID: 1113317
Extracted: N/A

Type: Field Sample
Analyzed: 10/05/2004 10:19

Site: DK28126
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-42-8	Boron	5.0	30.7533	31	ug/L

Sample ID: 1114379
Extracted: N/A

Type: Matrix Spike
Analyzed: 10/05/2004 10:21

Site: DK28126
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	Parent Amt	%Rec	Limits	P/F
7440-42-8	Boron	100	145.7434	30.753	115	70-130	Pass

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 69444
PC File Name: 100504C
Order Number: 102971

Instrument: ICP-MS Y
Analyst: T. Olejnik
Receipt Batch: 132599

Method(s): 200.8
Submitted By: T. Olejnik
Today's Date: 10/19/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1114380
Extracted: N/A

Type: Matrix Spike Duplicate
Analyzed: 10/05/2004 10:24

Site: DK28126
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	Parent Amt	%Rec	Limits	P/F
7440-42-8	Boron	100	146.6174	30.753	116	70-130	Pass

Sample ID: 1115297
Extracted: N/A

Type: Continuing Cali. Verification
Analyzed: 10/05/2004 10:26

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-42-8	Boron	50.0	55.8069	112	85-115	Pass

Sample ID: 1115298
Extracted: N/A

Type: Continuing Calibration Blank
Analyzed: 10/05/2004 10:28

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-42-8	Boron	5.0	1.6757	< 5.0	ug/L

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 69510
PC File Name: N/A
Order Number: 102971

Instrument: IC BO
Analyst: S. Lovick
Receipt Batch: 132599

Method(s): 300.0
Submitted By: N. Banaszak
Today's Date: 10/19/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1122297
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 10/05/2004 19:55

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
16887-00-6	Chloride	2.0	0.0000	< 2.0	mg/L

Sample ID: 1122299
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 10/05/2004 19:55

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
14808-79-8	Sulfate	5.0	0.0000	< 5.0	mg/L

Sample ID: 1122300
Extracted: N/A

Type: Laboratory Fortified Blank
Analyzed: 10/05/2004 19:55

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
16887-00-6	Chloride	10.0	9.2900	93	90-110	Pass

Sample ID: 1122302
Extracted: N/A

Type: Laboratory Fortified Blank
Analyzed: 10/05/2004 19:55

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
14808-79-8	Sulfate	25.0	23.3700	93	90-110	Pass

Sample ID: 1122303
Extracted: N/A

Type: Instrument Performance Check
Analyzed: 10/05/2004 19:55

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
16887-00-6	Chloride	20.0	19.7100	99	90-110	Pass

Sample ID: 1122305
Extracted: N/A

Type: Instrument Performance Check
Analyzed: 10/05/2004 19:55

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
14808-79-8	Sulfate	50.0	47.9600	96	90-110	Pass

Sample ID: 1122306
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 10/05/2004 19:55

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
16887-00-6	Chloride	2.0	0.0000	< 2.0	mg/L

Sample ID: 1122308
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 10/05/2004 19:55

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
14808-79-8	Sulfate	5.0	0.0000	< 5.0	mg/L

Sample ID: 1113310
Extracted: N/A

Type: Field Sample
Analyzed: 10/05/2004 19:55

Site: DK28124
Dil Factor: 3.000

CAS Number	Parameter	MRL	Amount	Report	Units
16887-00-6	Chloride	2.0	14.4900	14	mg/L

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 69510
PC File Name: N/A
Order Number: 102971

Instrument: IC BO
Analyst: S. Lovick
Receipt Batch: 132599

Method(s): 300.0
Submitted By: N. Banaszak
Today's Date: 10/19/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1113313 Type: Field Sample
Extracted: N/A Analyzed: 10/05/2004 19:55
Site: DK28125
Dil Factor: 3.000

CAS Number	Parameter	MRL	Amount	Report	Units
16887-00-6	Chloride	2.0	14.1300	14	mg/L
14808-79-8	Sulfate	5.0	38.4300	38	mg/L

Sample ID: 1113316 Type: Field Sample
Extracted: N/A Analyzed: 10/05/2004 19:55
Site: DK28126
Dil Factor: 3.000

CAS Number	Parameter	MRL	Amount	Report	Units
16887-00-6	Chloride	2.0	13.7400	14	mg/L
14808-79-8	Sulfate	5.0	42.0000	42	mg/L

Sample ID: 1122309 Type: Instrument Performance Check
Extracted: N/A Analyzed: 10/05/2004 19:55
Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
16887-00-6	Chloride	20.0	19.6400	98	90-110	Pass

Sample ID: 1122311 Type: Instrument Performance Check
Extracted: N/A Analyzed: 10/05/2004 19:55
Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
14808-79-8	Sulfate	50.0	48.0000	96	90-110	Pass

Sample ID: 1122312 Type: Laboratory Method Blank
Extracted: N/A Analyzed: 10/05/2004 19:55
Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
16887-00-6	Chloride	2.0	0.0300	< 2.0	mg/L

Sample ID: 1122314 Type: Laboratory Method Blank
Extracted: N/A Analyzed: 10/05/2004 19:55
Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
14808-79-8	Sulfate	5.0	0.0000	< 5.0	mg/L

Sample ID: 1122315 Type: Instrument Performance Check
Extracted: N/A Analyzed: 10/05/2004 19:55
Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
16887-00-6	Chloride	20.0	19.6200	98	90-110	Pass

Sample ID: 1122317 Type: Instrument Performance Check
Extracted: N/A Analyzed: 10/05/2004 19:55
Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
14808-79-8	Sulfate	50.0	48.1200	96	90-110	Pass

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 69510
PC File Name: N/A
Order Number: 102971

Instrument: IC BO
Analyst: S. Lovick
Receipt Batch: 132599

Method(s): 300.0
Submitted By: N. Banaszak
Today's Date: 10/19/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1122318
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 10/05/2004 19:55

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
16887-00-6	Chloride	2.0	0.0000	< 2.0	mg/L

Sample ID: 1122320
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 10/05/2004 19:55

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
14808-79-8	Sulfate	5.0	0.0000	< 5.0	mg/L

Sample ID: 1122321
Extracted: N/A

Type: Instrument Performance Check
Analyzed: 10/05/2004 19:55

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
16887-00-6	Chloride	20.0	19.6300	98	90-110	Pass

Sample ID: 1122323
Extracted: N/A

Type: Instrument Performance Check
Analyzed: 10/05/2004 19:55

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
14808-79-8	Sulfate	50.0	47.9900	96	90-110	Pass

Sample ID: 1122324
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 10/05/2004 19:55

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
16887-00-6	Chloride	2.0	0.0000	< 2.0	mg/L

Sample ID: 1122326
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 10/05/2004 19:55

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
14808-79-8	Sulfate	5.0	0.0000	< 5.0	mg/L

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 69517
PC File Name: 100604A
Order Number: 102971

Instrument: Hg Analyzer BY
Analyst: T. Olejnik
Receipt Batch: 132599

Method(s): 245.1
Submitted By: T. Olejnik
Today's Date: 10/19/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1116562 Type: Instrument Performance Check Site: N/A
Extracted: N/A Analyzed: 10/06/2004 13:29 Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7439-97-6	Mercury	1.0	1.0100	101	95-105	Pass

Sample ID: 1116563 Type: Initial Calibration Blank Site: N/A
Extracted: N/A Analyzed: 10/06/2004 13:32 Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7439-97-6	Mercury	0.1	-0.0200	< 0.1	ug/L

Sample ID: 1116564 Type: Quality Control Sample Site: N/A
Extracted: N/A Analyzed: 10/06/2004 13:34 Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7439-97-6	Mercury	1.0	1.0600	106	90-110	Pass

Sample ID: 1116565 Type: Laboratory Reagent Blank Site: N/A
Extracted: 10/05/2004 14:10 Analyzed: 10/06/2004 13:37 Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7439-97-6	Mercury	0.1	-0.0200	< 0.1	ug/L

Sample ID: 1116566 Type: Laboratory Fortified Blank Site: N/A
Extracted: 10/05/2004 14:10 Analyzed: 10/06/2004 13:40 Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7439-97-6	Mercury	1.0	1.0400	104	85-115	Pass

Sample ID: 1113311 Type: Field Sample Site: DK28124
Extracted: 10/05/2004 14:10 Analyzed: 10/06/2004 13:48 Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7439-97-6	Mercury	0.1	-0.0100	< 0.1	ug/L

Sample ID: 1113314 Type: Field Sample Site: DK28125
Extracted: 10/05/2004 14:10 Analyzed: 10/06/2004 13:51 Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7439-97-6	Mercury	0.1	-0.0100	< 0.1	ug/L

Sample ID: 1113317 Type: Field Sample Site: DK28126
Extracted: 10/05/2004 14:10 Analyzed: 10/06/2004 13:54 Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7439-97-6	Mercury	0.1	-0.0100	< 0.1	ug/L

Sample ID: 1116567 Type: Continuing Inst. Perf. Check Site: N/A
Extracted: N/A Analyzed: 10/06/2004 14:16 Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7439-97-6	Mercury	1.0	1.1000	110	90-110	Pass

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 69517
PC File Name: 100604A
Order Number: 102971

Instrument: Hg Analyzer BY
Analyst: T. Olejnik
Receipt Batch: 132599

Method(s): 245.1
Submitted By: T. Olejnik
Today's Date: 10/19/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1116568
Extracted: N/A

Type: Continuing Calibration Blank
Analyzed: 10/06/2004 14:19

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7439-97-6	Mercury	0.1	0.0000	< 0.1	ug/L

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 69533
PC File Name: 100704A
Order Number: 102971

Instrument: Chem Analyzer BH
Analyst: M. Collins
Receipt Batch: 132599

Method(s): 353.2
Submitted By: N. Banaszak
Today's Date: 10/19/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1118500
Extracted: N/A

Type: Quality Control Sample
Analyzed: 10/07/2004 14:01

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
N/A	Nitrate+Nitrite	6.0	5.9526	99	90-110	Pass

Sample ID: 1118501
Extracted: N/A

Type: Laboratory Fortified Blank
Analyzed: 10/07/2004 14:02

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
N/A	Nitrate+Nitrite	8.0	7.8234	98	90-110	Pass

Sample ID: 1118504
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 10/07/2004 14:25

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
N/A	Nitrate+Nitrite	0.1	0.0010	< 0.1	mg/L

Sample ID: 1118505
Extracted: N/A

Type: Continuing Calibration Check
Analyzed: 10/07/2004 14:26

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
N/A	Nitrate+Nitrite	4.0	3.9920	100	90-110	Pass

Sample ID: 1113312
Extracted: N/A

Type: Field Sample
Analyzed: 10/07/2004 14:34

Site: DK28124
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
N/A	Nitrate+Nitrite	0.1	0.0357	< 0.1	mg/L

Sample ID: 1113315
Extracted: N/A

Type: Field Sample
Analyzed: 10/07/2004 14:35

Site: DK28125
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
N/A	Nitrate+Nitrite	0.1	0.0431	< 0.1	mg/L

Sample ID: 1113318
Extracted: N/A

Type: Field Sample
Analyzed: 10/07/2004 14:36

Site: DK28126
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
N/A	Nitrate+Nitrite	0.1	0.0204	< 0.1	mg/L

Sample ID: 1118506
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 10/07/2004 14:36

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
N/A	Nitrate+Nitrite	0.1	0.0082	< 0.1	mg/L

Sample ID: 1118507
Extracted: N/A

Type: Continuing Calibration Check
Analyzed: 10/07/2004 14:37

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
N/A	Nitrate+Nitrite	4.0	3.9780	99	90-110	Pass

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 69589
PC File Name: N/A
Order Number: 102971

Instrument: IC BO
Analyst: S. Lovick
Receipt Batch: 132599

Method(s): 300.0
Submitted By: N. Banaszak
Today's Date: 10/19/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1122329
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 10/06/2004 22:09

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
14808-79-8	Sulfate	5.0	0.0000	< 5.0	mg/L

Sample ID: 1122332
Extracted: N/A

Type: Laboratory Fortified Blank
Analyzed: 10/06/2004 22:09

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
14808-79-8	Sulfate	25.0	23.2700	93	90-110	Pass

Sample ID: 1122335
Extracted: N/A

Type: Instrument Performance Check
Analyzed: 10/06/2004 22:09

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
14808-79-8	Sulfate	50.0	48.0600	96	90-110	Pass

Sample ID: 1122338
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 10/06/2004 22:09

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
14808-79-8	Sulfate	5.0	0.0000	< 5.0	mg/L

Sample ID: 1113310
Extracted: N/A

Type: Field Sample
Analyzed: 10/06/2004 22:09

Site: DK28124
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
14808-79-8	Sulfate	5.0	0.0600	< 5.0	mg/L

Sample ID: 1122341
Extracted: N/A

Type: Instrument Performance Check
Analyzed: 10/06/2004 22:09

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
14808-79-8	Sulfate	50.0	47.8900	96	90-110	Pass

Sample ID: 1122344
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 10/06/2004 22:09

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
14808-79-8	Sulfate	5.0	0.0000	< 5.0	mg/L

Sample ID: 1122347
Extracted: N/A

Type: Instrument Performance Check
Analyzed: 10/06/2004 22:09

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
14808-79-8	Sulfate	50.0	47.8700	96	90-110	Pass

Sample ID: 1122350
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 10/06/2004 22:09

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
14808-79-8	Sulfate	5.0	0.0000	< 5.0	mg/L

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 69589
PC File Name: N/A
Order Number: 102971

Instrument: IC BO
Analyst: S. Lovick
Receipt Batch: 132599

Method(s): 300.0
Submitted By: N. Banaszak
Today's Date: 10/19/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1122353
Extracted: N/A

Type: Instrument Performance Check
Analyzed: 10/06/2004 22:09

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
14808-79-8	Sulfate	50.0	47.9200	96	90-110	Pass

Sample ID: 1122356
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 10/06/2004 22:09

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
14808-79-8	Sulfate	5.0	0.0000	< 5.0	mg/L



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

QWM

OSHWM

QER

QAM

CHAIN OF CUSTODY

I Certify that the sample(s) listed below was/were collected by me or in my presence.

Date: _____ / _____ / _____

P.O. #:

Signature: Amber Harrold

Section: Ground Water

CLIENT PROVIDED SAMPLE CONTAINER

P-Plastic

G-Glass

N.M.-Narrow Mouth

W.M.-Wide Mouth

B. O₂-Bacti. Only

Y **N**

I certify that I received the above sample(s)

SIGNATURE	DATE AND TIME	SEALS INTACT		COMMENTS
RELINQUISHED BY: <i>Jean Harri</i>	9/30/04	Y	N	
RECEIVED BY: <i>Pat Muff</i>	10:45 AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			

Lab Custodian

I certify that I received the above sample(s) and is/are recorded in the official record book. The same samples will be in custody of competent laboratory personnel at all times or locked in a secure area.

Signature:

Date: 9/30/04

Time: 12:45 AM/PM

Lab:

Address:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER/GROUND WATER SECTION
BAA 1-86 SAMPLE TASK SHEET**

Site ID: 04700014 IDEM Sample #: DK 28124* To DK 28127 Project Date: 9/28/04
 Sampler: Harris Assigned Lab: EHL HLI

TASK 1 - METALS						
Antimony	X	Barium	X	Aluminum	X	
Arsenic	X	Calcium	X	Boron	X	
Beryllium	X	Iron	X	Cobalt		
Cadmium	X	Magnesium	X	Manganese		
Chromium	X	Potassium	X	Selenium		
Copper	X	Sodium	X	Silver		
Lead	X			Titanium		
Mercury	X			Thallium		
Nickel	X			Zinc	X	

TASK 2 – GENERAL INORGANICS, MICROBIOLOGIC, NUTRIENTS & ORGANICS			
Alkalinity	X	Total Coliforms,	Phosphorous (Applicable to All Forms)
BOD5		Cyanide, Total	Solids, Filterable Residue (TDS)
BOD, Ultimate		Cyanide, Amenable	Solids, Non-Filterable Residue (TSS)
Bromide		Fluoride	Solids, % (Solid Waste Matrices)
Chemical Oxygen Demand		Hardness as CaCO3	Solids, Settleable Residue
Chloride	X	Nitrogen, Kjeldahl (TKN)	Specific Conductanc
Chlorine, Free & Total		Nitrogen, Nitrate	Sulfate
Chlorine, Free		Nitrogen, Nitrite	Total Organic carbon (TOC)
Chromium, Hexavalent		Nitrogen, Nitrate-Nitrite	X Turbidity
Coliforms, E.coli		pH (Lab)	
Coliforms, Fecal		Phosphorous, ortho	

TASK 3 - ORGANICS						
524.2 – Volatile Organics		504.1 - EDB & DBCP		513 -TCDD (2,3,7,8-TCDD)		
524.2E – Volatile Organics Extended		505 - Organohalides & PCB's		515.1 - Chlorinated Acids - ECD		
525.2 – Semivolatile Organics		507 - Nitrogen/Phosphorous NPD		515.3 - Chlorinated Acids - ECD		
525.2E – Semivolatile Organics Extended		508.1 - Chlorinated Acids- ECD		531.1 - Carbamates		

SAS	COMMENTS						
Worst Case Approximation	<10ppb	X	1-10ppm	10-100ppm	100-1000ppm	>1000ppm	
REPORTING TIME (Days)	30	X	14	2			
CLIENT PROVIDED SAMPLE CONTAINER							

Mailed Reports	Hand Delivered Reports	Contact Information
Mitt Denney IDEM Ground Water Section, 66-33 100 N Senate Ave Indianapolis, IN 46204	Mitt Denney IDEM Ground Water Section, 66-33 2525 N Shadeland Ave Indianapolis, IN 46219	(317) 308-3324 (317) 308-3339, fax mldenny@dem.state.in.us

102971

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER/GROUND WATER SECTION
BAA 1-86 SAMPLE TASK SHEET**

Site ID: 04700014 IDEM Sample #: DK 28124 To DK 28127 Project Date: 9/28/04
 Sampler: Harris Assigned Lab: EHL HLI

TASK 1 - METALS							
Antimony	X	Barium	X	Aluminum	X		
Arsenic	X	Calcium	X	Boron	X		
Beryllium	X	Iron	X	Cobalt			
Cadmium	X	Magnesium	X	Manganese			
Chromium	X	Potassium	X	Selenium			
Copper	X	Sodium	X	Silver			
Lead	X			Titanium			
Mercury	X			Thallium			
Nickel	X			Zinc	X		

TASK 2 - GENERAL INORGANICS, MICROBIOLOGIC, NUTRIENTS & ORGANICS

Alkalinity	X	Total Coliforms,	Phosphorous (Applicable to All Forms)
BOD5		Cyanide, Total	Solids, Filterable Residue (TDS)
BOD, Ultimate		Cyanide, Amenable	Solids, Non-Filterable Residue (TSS)
Bromide		Fluoride	Solids, % (Solid Waste Matrices)
Chemical Oxygen Demand		Hardness as CaCO ₃	Solids, Settleable Residue
Chloride	X	Nitrogen, Kjeldahl (TKN)	Specific Conductanc
Chlorine, Free & Total		Nitrogen, Nitrate	Sulfate
Chlorine, Free		Nitrogen, Nitrite	Total Organic carbon (TOC)
Chromium, Hexavalent		Nitrogen, Nitrate-Nitrite	Turbidity
Coliforms, E.coli		pH (Lab)	
Coliforms, Fecal		Phosphorous, ortho	

TASK 3 - ORGANICS

524.2 - Volatile Organics	504.1 - EDB & DBCP	513 - TCDD (2,3,7,8-TCDD)
524.2E - Volatile Organics Extended	505 - Organohalides & PCB's	515.1 - Chlorinated Acids - ECD
525.2 - Semivolatile Organics	507 - Nitrogen/Phosphorous NPD	515.3 - Chlorinated Acids - ECD
525.2E - Semivolatile Organics Extended	508.1 - Chlorinated Acids- ECD	531.1 - Carbamates

SAS						
Worst Case Approximation	<10ppb	X	1-10ppm	10-100ppm	100-1000ppm	>1000ppm
REPORTING TIME (Days)	30	X	14	2		

COMMENTS

Mailed Reports	Hand Delivered Reports	Contact Information
Mitt Denney IDEM Ground Water Section, 66-33 100 N Senate Ave Indianapolis, IN 46204	Mitt Denney IDEM Ground Water Section, 66-33 2525 N Shadeland Ave Indianapolis, IN 46219	(317) 308-3324 (317) 308-3339, fax mldenny@dem.state.in.us



Environmental
Health Laboratories

110 S. Hill Street
South Bend, IN 46611
(800) 332-4345

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